UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,542	12/29/2001	Senaka Balasuriya	33692.01.0051	1424

23418   7590   10/22/2003

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EXAMINER
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ART UNIT	PAPER NUMBER
2654	14

DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.		Applicant(s)
Office Action Summary	10/034,542		BALASURIYA, SENAKA
	Examiner		Art Unit
	V. Paul Harper		2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 September 2003</u> .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>2-6,8-11,13,15-18 and 21-26</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>2-6,8-11,13,15-18 and 21-26</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5)☐ Notice of Informal Patent Application (PTO-152)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6)☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed
or described as set forth in section 102 of this title, if the differences between the
subject matter sought to be patented and the prior art are such that the subject
matter as a whole would have been obvious at the time the invention was made
to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was
made.

1.   Claims 2, 4-6, 13, 15-18, 23 and 25 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Baruch et al. (U.S. Patent Application Publication 2002/0091518 A1),

hereinafter referred to as Baruch, in view of Lai et al. (U.S. Patent 6,006,183),

hereinafter referred to as Lai, Goldhor (U.S. Patent 5,101,375), and further in view of

Scott et al. (U.S. Patent 6,101,473), hereinafter referred to as Scott.

Regarding claim 23, Baruch discloses a voice control system with multiple

speech recognition engines. Baruch's system includes the ability to input a voice

command to two recognition engines (abstract, ¶3, ¶10), which corresponds to

"providing an audio command to a first speech recognition engine and at least one

second speech recognition engine"; and to recognize the command with both

recognition engines generating recognition results (¶9), which corresponds to

"recognizing the audio command within the first speech recognition engine to generate

at least one first recognized audio command, . . . ; and recognizing the audio command

within the at least one second speech recognition engine, independent of recognizing

the audio command by the first speech recognition engine, to generate at least one

second recognized audio command, ..." In addition, Baruch suggests the use of

confidence levels (¶39) but does not specifically indicate that the two recognizers

generate confidence values associated with their individual recognition results.

However, the examiner contends that this concept was well known in the art, as taught

by Lai.

Lai discloses a speech recognition confidence level display that produces a score

(confidence level) for each word that is recognized (col. 2, lines 61-63).

Therefore, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify Baruch by specifically providing a confidence

level with each recognition result, as taught by Lai, for the purpose of determining the

degree of confidence associated with a given recognition event.

In addition, Baruch teaches the choosing between the first recognized result of

the first recognition engine and a second recognized result of the second engine (¶9),

which corresponds to "selecting at least one recognized audio command having a

recognized audio command confidence value from the at least one first recognized

audio command and the at least one second recognized audio command based on the

at least one first confidence value and the at least one second confidence value". But

Baruch does not specifically teach "inserting the at least one recognized audio

command within a form". However, the examiner contends that this concept was well

known in the art, as taught by Goldhor.

In the same field of endeavor, Goldhor teaches a report generation method where speech recognition can be used to insert text into a report form (abstract, Fig. 2, col. 1, lines 26-35, lines 60-65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch by specifically providing the ability to insert words into a form using speech recognition, as taught by Goldhor, since this approach allows to recognition system to adjust to what is expected in the current entry field (col. 1, lines 30-35).

Baruch further teaches using the recognizer to choose and transfer a language contained in a database or information from a device (PDA) over the communications links (¶44, penultimate sentence, ¶47, Fig. 1, **30, ¶5**), but Baruch does not specifically teach "accessing an external content server in response to the at least one recognized audio command to retrieve encoded information therefrom." However, the examiner contends that this concept was well known in the art, as taught by Scott.

In the same field of endeavor, Scott discloses a method for accessing the Internet using a speech recognizer where, for example, a user can get a stock quotes over the Internet using a recognizer (Fig. 1, col. 3, lns. 5-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch by specifically providing access to the Internet, as taught by Scott, to increase access to information.

Regarding claim 2, Baruch in view of Lai, Goldhor, and Scott teach everything claimed, as applied above (see claim 1); in addition, Baruch teaches receiving

information from a PDA or email handler over a communications link (Fig. 1, **30**, ¶5, ¶49), but Baruch does not specifically teach, (a)"receiving the encoded information from the content server"; and (b) "decoding the encoded information." However, the examiner contends that these concepts were well known in the art, as taught by Scott.

Scott further discloses receiving information over the Internet (col. 3, lns. 5-10), corresponding to (a), above, where the information received will necessarily require decoding (e.g., interpreting HTML formatted data for display), corresponding to (b), above.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch in view of Lai, Goldhor, and Scott by specifically providing the ability to receive and decode data from the Internet, as taught by Scott, since information from the Internet is widely viewed as being useful.

Regarding claim 4, Baruch in view of Lai, Goldhor, and Scott teach everything claimed, as applied above (see claim 2); but Baruch in view of Lai, Goldhor, and Scott do not specifically teach that "prior to accessing the content server, executing at least one operation based on the at least one recognized audio command." However, the examiner contends that this concept was well known in the art, as taught by Scott.

Scott further teaches that a user can tell the speech server to "show me the stock quote" to initiate access to a web page (col. 3, lns. 5-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch in view of Lai, Goldhor, and Scott by

specifically providing content server access, as taught by Scott, for the purpose

obtaining information from the Internet.

Regarding claim 5, Baruch in view of Lai, Goldhor, and Scott teach everything

claimed, as applied above (see claim 2); in addition, Baruch teaches that the voice

controlled apparatus can give user feedback (¶7), which corresponds to "verifying the at

least one recognized audio command."

Regarding claim 6, Baruch in view of Lai, Goldhor, and Scott teach everything

claimed, as applied above (see claim 23); in addition, Baruch teaches that if a voice

input is not recognized, the system may provide a visual and/or audible message (¶40),

which corresponds to "generating an error notification." But Baruch in view of Lai,

Goldhor, and Scott do not specifically teach that this would occur "when the at least one

first confidence value and the at least one second confidence value are below a

minimum confidence level." However it is necessary in a system such as Baruch in

view of Lai, Goldhor, and Scott's where a recognition decision is made based on

confidence levels that if the results of both recognition units are below their respective

minimum confidence levels, an error would result.

Regarding claim 25, Baruch discloses a voice control system with multiple

speech recognition engines. Baruch's system includes the ability to input a command

from a microphone to a recognition engine (abstract, ¶3, ¶10), which corresponds to "a

first speech recognition means, operably coupled to an audio subsystem, for receiving

an audio command and generating at least one first recognized audio command." In

addition, Baruch suggests the use of confidence values (¶39), but Baruch does not

specifically indicate, "the at least one first recognized audio command has a first

confidence value." However, the examiner contends that this concept was well known in

the art, as taught by Lai.

Lai discloses a speech recognition confidence level display that produces a score

(confidence level) for each word that is recognized (col. 2, lines 61-63).

Therefore, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify Baruch by specifically providing a confidence

level with each recognition result, as taught by Lai, for the purpose of determining the

degree of confidence associated with a given recognition event.

Baruch's system includes the ability to input a command from a microphone to a

second recognition engine (abstract, ¶3, ¶10, Fig. 1), which corresponds to "a second

speech recognition means, operably coupled to the audio subsystem, for receiving the

audio command and generating, independent of the first speech recognition means, at

least one second recognized audio command." In addition, Baruch suggests the use of

confidence values (¶39) but does not specifically indicate "each of the at least one

second recognized audio command has a second confidence value." However, the

examiner contends that this concept was well known in the art, as taught by Lai.

Lai further teaches the production of a score (confidence level) for each word that

is recognized (col. 2, lines 61-63).

Therefore, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify Baruch by specifically providing a confidence

level with each recognition result, as taught by Lai, for the purpose of determining the degree of confidence associated with a given recognition event.

Baruch's system has a control unit **18** connected directly to the recognition engines (¶23) and the ability to choose between the recognition results from the first and second recognizers (¶9, Fig. 1), which corresponds to "a means, operably coupled to the first speech recognition means and the second speech recognition means, for receiving the at least one first recognized audio command and the at least one second recognized audio command." In addition, Baruch teaches: that the recognition engines are connected to a control unit **18** which is connected to the engine association unit **20** and is also connected to the digital communication unit **30** (Fig. 1, **18**), which corresponds to "a dialog manager operably coupled to the first speech recognition means and the second speech recognition means ...". But Baruch does not specifically teach that the dialog manager is "operably coupleable to an external content server". However, the examiner contends that this concept was well known in the art, as taught by Scott.

In the same field of endeavor, Scott teaches the use of a speech/web browser **7** that is TCP linked **13** to the Internet **2** that can be used to access information (col. 3, lns. 3-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch by specifically providing the techniques, as taught by Scott, to allow convenient access to information on the Internet.

Furthermore, Baruch teaches that the recognition results go to the control unit **18** and the result of the speech recognition is used in command and control applications such as the retrieval of messages or data from a PDA (¶3, ¶49), which corresponds to "the dialog manager determines a dialog manager audio command from the at least one recognized command confidence levels".

But Baruch does not specifically teach "inserting the dialog manager audio command within a form". However, the examiner contends that this concept was well known in the art, as taught by Goldhor.

In the same field of endeavor, Goldhor teaches a report generation method where speech recognition can be used to insert text into a report form (abstract, Fig. 2, col. 1, lines 26-35, lines 60-65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch by specifically providing the ability to insert words into a form using speech recognition, as taught by Goldhor, since this approach allows to recognition system to adjust to what is expected in the current entry field (col. 1, lines 30-35).

Furthermore, Baruch does not specifically teach "such that the dialog manager access the external the content server in response to the dialog manager audio command to retrieve encoded information therefrom." However, the examiner contends that this concept was well known in the art, as taught by Scott.

Scott further discloses a method for accessing the Internet using speech recognition where for example a user can get a stock quote over the Internet using a recognizer (Fig. 1, col. 3, Ins. 5-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch by specifically providing access to the Internet, as taught by Scott, to increase access to information.

Regarding claim 13, Baruch in view of Lai, Goldhor, and Scott teach everything claimed, as applied above (see claim 25). In addition, Baruch teaches the choosing between a first recognized result of the first engine and a second recognized result of the second engine where the recognition units are coupled to a control unit (¶9, Fig. 1, **18**), which corresponds to "a dialog manager operably coupled to the means for receiving, wherein the means for receiving selects at least one recognized audio command having a recognized confidence value from the at least one first recognized audio command and the at least one second recognized audio command based on the at least one first confidence value and the at least one second confidence value."

Regarding claim 15, Baruch in view of Lai, Goldhor, and Scott teach everything claimed, as applied above (see claim 25). In addition, Baruch teaches that through voice commands a user can access a list of previously selected languages or email messages (¶44, ¶49), but neither Baruch nor Baruch in view of Lai, Goldhor, and Scott specifically teach, "wherein the dialog manager retrieves encoded information in response to the dialog manager audio command." However, the examiner contends that this concept was well known in the art, as taught by Scott.

Scott further teaches the use of a speech/web browser **7** that is TCP linked **13** to the Internet **2** that can be used to access information (col. 3, lns. 3-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch in view of Lai, Goldhor, and Scott by specifically providing the techniques, as taught by Scott, to allow convenient access to information on the Internet.

Regarding claim 16, Baruch in view of Lai, Goldhor, and Scott teach everything claimed, as applied above (see claim 15). In addition, Baruch teaches that a list of requested languages may be provided by loudspeaker (¶44), which corresponds to "a speech synthesis engine operably coupled to the dialog manager, wherein the speech synthesis engine receives speech encoded information from the dialog manager and generates speech formatted information."

Regarding claim 17, Baruch in view of Lai, Goldhor, and Scott teach everything claimed, as applied above (see claim 16). In addition, Baruch teaches that a speaker **34** is attached to a digital communication unit **30** and a control unit **18**, and that this subsystem can generate audio prompts (¶41), which corresponds to "the audio subsystem is operably coupled to the speech synthesis engine, wherein the audio subsystem receives the speech formatted information and provides an output message."

Regarding claim 18, Baruch in view of Lai, Goldhor, and Scott teach everything claimed, as applied above (see claim 17). In addition, Baruch teaches that if the input is not recognized an audible message may be given (¶41), which corresponds to "the

means for receiving provides the dialog manager with an error notification, the output message is an error statement."

2.   Claims 3, 8-11, 21, 22, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baruch in view of Lai, Scott, and Goldhor and further in view of Baker (U.S. Patent No. 6,122,613).

Regarding claim 3, Baruch in view of Lai, Scott, and Goldhor teach everything claimed, as applied above (see claim 2), but Baruch in view of Lai, Goldhor, and Scott do not specifically teach "weighting the at least one first confidence value by a first weight factor and weighting the at least one second confidence values by a second weight factor." However, the examiner contends that this concept was well known in the art, as taught by Baker.

Baker discloses a voice control system with multiple voice recognition engines where the combining of the recognition results based on the weighting factors (col. 3, 38-42).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch in view of Lai, Goldhor, and Scott by specifically weighing the results from each recognizer, as taught by Baker, for the purpose of assigning a greater weight to the recognizer known to be more accurate (Baker, col. 3, line 42).

Regarding claim 24, Baruch discloses a voice control system with multiple speech recognition engines **10**. Baruch's system includes the ability to input an audio

command to two recognition engines (abstract, ¶3, ¶10), which corresponds to

"providing an audio command to a terminal speech recognition engine and at least one

. . . [additional] speech recognition engine; recognizing the audio command within the

terminal speech recognition engine to generate at least one terminal recognized audio

command." Baruch suggests that use of confidence levels (¶39) but does not

specifically teach "wherein the at least one terminal [or network] recognized audio

command has a corresponding terminal confidence value." However, the examiner

contends that this concept was well known in the art, as taught by Lai.

Lai discloses a speech recognition confidence level display and teaches the

production of a score (confidence level) for each word that is recognized (col. 2, lines

61-63).

Therefore, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify Baruch by specifically providing a confidence

level with each recognition result, as taught by Lai, for the purpose of determining the

degree of confidence associated with a given recognition event.

In addition, Baruch does not specifically teach that the second recognizer is a

network speech recognition engine. However, the examiner contends that the concept

of the use of a second recognizer connected on a network was well known in the art, as

taught by Baker.

Barker teaches speech recognition using two recognizers applied to the same

input sample, where the second recognizer can be a network device (Fig. 3, Fig. 5).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch by specifically providing an additional recognizer accessed by a network connection, as taught by Baker, for the purpose of providing access to a more powerful recognizer through a network connection.

In addition, Baruch does not specifically teach the step of "recognizing the audio command within the at least one network speech recognition engine to generate at least one network recognized audio command, wherein the at least one network recognized audio command has a corresponding network confidence value." However, the examiner contends that this concept was well known in the art, as taught by Baker.

Baker further teaches that the output of the network recognizer is assigned a score (or confidence level) (abstract, Fig. 5).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch in view of Lai and Scott, as taught by Baker, to aid in the decision process when selecting from between the recognition candidates.

In addition, Baruch in view of Lai, Scott and Baker teach: the choosing between a first recognized result of the first engine and a second recognized result of the second engine (Baruch, ¶9) where when confidence values are used, as taught above by Lai and Baker, these values would be used in the recognition selection process, which corresponds to "selecting at least one recognized audio command having a recognized audio command confidence value from the at least one terminal recognized audio command and the at least one network recognized audio command."

But Baruch does not specifically teach "inserting the at least one recognized audio command with a form." However, the examiner contends that this concept was well known in the art, as taught by Goldhor.

In the same field of endeavor, Goldhor teaches a report generation method where speech recognition can be used to insert text into a report form (abstract, Fig. 2, col. 1, lines 26-35, lines 60-65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch by specifically providing the ability to insert words into a form using speech recognition, as taught by Goldhor, since this approach allows to recognition system to adjust to what is expected in the current entry field (col. 1, lines 30-35).

In addition, Baruch teaches using the recognizer to choose and transfer a language contained in a database or information from a device (PDA) over the communications links (Baruch, ¶44, penultimate sentence, ¶47, Fig. 1, **30, ¶5**), but neither Baruch nor Baruch in view of Lai, Scott, Goldhor, and Baker teach, "accessing an external content server in response to the at least one recognized audio command to retrieve encoded information therefrom." However, the examiner contends that this concept was well known in the art, as taught by Scott.

Scott further discloses a method for accessing the Internet using a speech recognizer to get a stock quote over the Internet (Fig. 1, col. 3, lns. 5-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch by specifically providing access to the Internet, as taught by Scott, to increase access to information.

Regarding claim 8, Baruch in view of Lai, Scott, Goldhor, and Baker teach everything claimed, as applied above (see claim 24); in addition, Baruch teaches that if a voice input is not recognized, the system may provide a visual and/or audible message (¶40), which corresponds to "prior to accessing a content server, generating an error notification." But Baruch in view of Lai, Scott, Goldhor, and Baker do not specifically teach that this would occur "when the at least one terminal confidence value and the at least one network confidence value are below a minimum confidence level." However, it is necessary in a system such as Baruch in view of Lai, Scott and Goldhor's when a recognition decision is made based on confidence levels that if the results of both recognition units are below the respective minimum confidence levels, an error would result.

Regarding claim 9, Baruch in view of Lai, Scott, Goldhor, and Baker teach everything claimed, as applied above (see claim 24), but Baruch in view of Lai, Scott, Goldhor, and Baker do not specifically teach "weighting the at least one terminal confidence value by a terminal weight factor and the at least one network confidence value by a network weight factor." However, the examiner contends that this concept was well known in the art, as taught by Baker.

Baker further teaches the combining of the recognition results based on the weighting factors (col. 3, 38-42).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch in view of Lai, Scott and Baker by specifically weighing the results from each recognizer, as taught by Baker, for the purpose of assigning a greater weight to the recognizer known to be more accurate (Baker, col. 3, line 42).

Regarding claim 10, Baruch in view of Lai, Scott, Goldhor, and Baker teach everything claimed, as applied above (see claim 24) including the assignment of a confidence level to the recognition events (Lai, col. 2, lines 61-63; Baker, abstract), but Baruch in view of Lai, Scott, Goldhor, and Baker do not specifically teach "filtering the at least one recognized audio command based on the at least one recognized audio command confidence value." However, the examiner contends that this concept was well known in the art, as taught by Lai.

Lai further discloses the ability to select score thresholds above or below which recognized words are displayed (col. 3, lines 36-40)

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch in view of Lai, Scott, Goldhor, and Baker by specifically supporting the filter capability, as taught by Lai, for the purpose of determining what the minimum confidence level for recognition will be.

In addition, Baruch teaches the choosing of a command based on the results from the recognizers (¶9) where the choice would necessarily be the command with the highest confidence, and in a control system such as Baruch's (abstract, ¶19) the recognized command would necessarily be executed, which corresponds to "executing

an operation based on the recognized audio command having the highest recognized audio command confidence value."

Regarding claim 11, Baruch in view of Lai, Scott, Goldhor, and Baker teach everything claimed, as applied above (see claim 24); in addition Baruch teaches the ability of the system to get confirmation from the user (¶50), which corresponds to "verifying the at least one recognized audio command to generate a verified recognized audio command"; and in a control system such as Baruch's (abstract, ¶19) the execution of the command would necessarily follow the affirmation, which corresponds to "executing an operation based on the verified recognized audio command."

Regarding claim 26, Baruch discloses a voice control system with multiple speech recognition engines **10**. Baruch's system includes the ability to input an audio command into a microphone **12** connected to a recognition engine (abstract, ¶3, ¶10), which corresponds to "a terminal speech recognition engine operably coupled to a microphone and coupled to receive an audio command and generate at least one terminal recognized audio command." But Baruch does not specifically teach "wherein the at least one terminal recognized audio command has a corresponding terminal confidence value." However, the examiner contends that this concept was well known in the art, as taught by Lai.

Lai discloses a speech recognition confidence level display, which indicates the production of a score (confidence level) for each word that is recognized (col. 2, lines 61-63).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch by specifically providing a confidence level with each recognition result, as taught by Lai, for the purpose of determining the degree of confidence associated with a given recognition event.

In addition, Baruch does not specifically disclose "at least one network speech recognition engine operably coupled to the microphone and coupled to receive the audio command and generate at least one network recognized audio command, independent of the terminal speech recognition engine, wherein the at least one network recognized audio command has a corresponding network confidence value." However, the examiner contends that the concept of the use of a second recognizer connected on a network was well known in the art, as taught by Baker.

Barker teaches speech recognition using multiple recognizers applied to the same input sample, where the second recognizer can be a network device and that a confidence value is associated recognition candidates (abstract, Fig. 3, **315, 309**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch by specifically providing an additional recognizer accessed by a network connection, as taught by Baker, for the purpose of providing access to a more powerful recognizer through a network connection.

In addition, Baruch teaches the connecting of the recognition engines to a control unit where the results are send **18**, which corresponds to "a comparator operably coupled to the terminal speech recognition engine operably coupled to receive the at least one terminal recognized audio command and further operably coupled to the at

least one network speech recognition engine operably coupled to receive the at least one network recognized audio command."

In addition, Baruch in view of Lai, Scott, Goldhor and Baker disclose the choosing between a first recognized result of the first engine and a second recognized result of the second engine (Baruch, ¶9) and where confidence values are used in the recognition selection process, as taught above by Lai and Baker, which corresponds to "a dialog manager operably coupled to the comparator, wherein the comparator selects at least one recognized audio command having a recognized confidence value from the at least one terminal recognized audio command and the at least one network recognized audio command based on the at least one terminal confidence value and the at least one network confidence value."

Baruch also teaches: the system my require confirmation before proceeding (¶50), which corresponds to "the selected at least one recognized audio command is provided to the dialog manager"; a choice is made in the control unit (dialog manager) between the recognition results of two recognizers where a decision rule might be applied based on confidence level (abstract, ¶9, ¶39, ¶50), which corresponds to "a dialog manager audio command determined by the dialog manager from the at least one recognized audio commands based on the at least one recognized audio command confidence levels such that the dialog manager." But Baruch does not specifically teach "inserts the dialog manager command within a form." However, the examiner contends that this concept was well known in the art, as taught by Goldhor.

In the same field of endeavor, Goldhor teaches a report generation method where speech recognition can be used to insert text into a report form (abstract, Fig. 2, col. 1, lines 26-35, lines 60-65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch by specifically providing the ability to insert words into a form using speech recognition, as taught by Goldhor, since this approach allows to recognition system to adjust to what is expected in the current entry field (col. 1, lines 30-35).

Furthermore, Baruch's system includes the control unit 18 is connected to both the engine association unit 20 and the digital communication unit 30 both of which can access databases (¶47-49), but neither Baruch nor Baruch in view of Lai, Scott, Goldhor, and Baker specifically teach, "the dialog manager being operably coupleable an external to a content server such that the operation executed by the dialog manager includes accessing the external content server to retrieve encoded information therefrom." However, the examiner contends that this concept was well known in the art, as taught by Scott.

In the same field of endeavor, Scott discloses a method for accessing the Internet using speech recognition where for example a user can get a stock quote over the Internet using a recognizer (Fig. 1, col. 3, lns. 5-10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch by specifically providing access to the Internet, as taught by Scott, to increased access to more information.

Regarding claim 21, Baruch in view of Lai, Scott, Baker and Goldhor teach everything claimed, as applied above (see claim 26). In addition, Baruch discloses a technique were a user may call up a list of languages or email based on a command (¶44, ¶48-49), but neither Baruch nor Baruch in view of Lai, Scott, Baker and Goldhor specifically teach "wherein the dialog manager retrieves the encoded information from the content server in response to the dialog manager audio command." However, the examiner contends that this concept was well known in the art, as taught by Scott.

Scott further discloses receiving information over the Internet in response to a spoken command (col. 3, lns. 5-10) (normally encoded as HTML formatted data for display).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baruch in view of Lai, Scott, Baker, and Goldhor by specifically providing the ability to receive and decode data from the Internet, as taught by Scott, since information from the Internet is widely viewed as being useful.

Regarding claim 22, Baruch in view of Lai, Scott, Baker and Goldhor teach everything claimed, as applied above (see claim 21). In addition, Baruch discloses a loudspeaker for audible output messages that is connected to the control unit through the digital communications unit (Fig. 1, ¶41), which corresponds to "wherein the speech synthesis engine receives speech encoded information from the dialog manager and generates speech formatted information; and a speaker operably coupled to the speech

synthesis engine, wherein the speaker receives the speech formatted information and

provides an output message."

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any response to this office action should be mailed to:

    Commissioner of Patents and Trademarks
    P.O. Box 1450
    Alexandria, VA 22313-1450

or faxed to:

    (703) 872-9314

Hand-delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
Arlington, VA.
Sixth Floor (Receptionist)

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dr. V. Paul Harper whose telephone number is (703)

305-4197. The examiner can normally be reached on Monday through Friday from 8:00

a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richemond Dorvil, can be reached on (703) 305-9645. The fax phone

number for the Technology Center 2600 is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Technology Center 2600 Customer Service office

whose telephone number is (703) 306-0377.

VPH/vph
October 10, 2003

RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER